

Greenwood County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/26/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 15 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Greenwood County economy.¹

These 15 sectors have a total direct output of approximately **\$142.9 million** and support **672.2 jobs** in Greenwood County. Running the model for all 15 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Greenwood County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	672.2	20.88%	\$35,896,609	22.68%	\$142,886,753	90.27%
Indirect Effect	144.8	4.50%	\$6,725,739	4.25%	\$20,185,973	12.75%
Induced Effect	95.5	2.97%	\$4,909,516	3.10%	\$10,102,042	6.38%
Total Effect	912.5	28.34%	\$47,531,865	30.03%	\$173,174,767	109.40%

As shown in the above table, agriculture, food, and food processing sectors support **912.5 jobs**, or **28.34%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$173.2 million, roughly 109.40% of the economy.**

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 15 agriculture, food, and food processing sectors is approximately **\$47.5 million**, or **30.03% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **30.03% of the total economy.**

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **506.3 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Greenwood County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	506.3	\$89,765,347
Animal production, except cattle and poultry and eggs	62.2	\$10,891,758
All other crop farming	55.8	\$6,057,479
Truck transportation	39.1	\$5,181,114
Wholesale trade	23.8	\$4,063,505
Extraction of natural gas and crude petroleum	16	\$1,998,053
Grain farming	14.4	\$7,529,132
Flour milling	13.3	\$18,877,936
Securities and commodity contracts intermediation and brokerage	12.3	\$835,457
Support activities for agriculture and forestry	8.8	\$303,048

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$89.8 million** to the Greenwood County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	506.3	\$89,765,347
Flour milling	13.3	\$18,877,936
Animal production, except cattle and poultry and eggs	62.2	\$10,891,758
Grain farming	14.4	\$7,529,132
Oilseed farming	3.8	\$6,279,044
All other crop farming	55.8	\$6,057,479
Truck transportation	39.1	\$5,181,114
Wholesale trade	23.8	\$4,063,505
Owner-occupied dwellings	0.0	\$2,945,511
Petroleum refineries	0.6	\$2,300,224

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Greenwood County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	3.8	\$6,279,043.67
Grain farming	14.4	\$7,529,131.41
Vegetable and melon farming	0.1	\$30,594.15
Fruit farming	1.0	\$95,628.29
Tree nut farming	0.01	\$3,508.52
Greenhouse, nursery, and floriculture production	3.7	\$527,382.97
All other crop farming	55.8	\$6,057,478.90
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	506.3	\$89,765,342.71
Dairy cattle and milk production	2.9	\$1,153,131.48
Poultry and egg production	0.9	\$802,163.96
Animal production, except cattle and poultry and eggs	62.2	\$10,891,757.01
Flour milling	13.3	\$18,877,937.32
Bread and bakery product, except frozen, manufacturing	2.7	\$279,583.75
Frozen cakes and other pastries manufacturing	0.2	\$23,249.30
Veterinary services	5.0	\$570,815.03

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Greenwood County, the retail sector was omitted.